

- 16.** A semiconductor device comprising:
a substrate; and
a gate structure on the substrate, the gate structure comprising a layer of semiconductor material overlying the substrate, a layer comprised of a metal overlying the layer of semiconductor material, a layer comprised of polycrystalline silicon overlying the layer comprised of a metal, a layer of silicide overlying the layer comprised of polycrystalline silicon and a cap layer overlying the layer of silicide.
- 17.** The semiconductor device of claim **16**, where the cap layer comprises a nitride.
- 18.** The semiconductor device of claim **16**, further comprising: an interlevel dielectric that at least partially overlies the gate structure; and a borderless contact comprised of a metal.
- 19.** The semiconductor device of claim **18**, where the interlevel dielectric comprises an oxide with a nitride liner.
- 20.** The semiconductor device of claim **18**, where the semiconductor device comprises a metal oxide semiconductor field effect transistor.
- 21.** A semiconductor device comprising:
a substrate;
a gate structure on the substrate, the gate structure comprising a metal gate core that is adjacent to a layer of dielectric material on at least two surfaces of the metal gate core; and
a cap layer overlying the layer of dielectric material and the metal gate core.
- 22.** The semiconductor device of claim **21**, where a top surface of the metal gate core is not covered by the layer of dielectric material.
- 23.** The semiconductor device of claim **21**, where the at least two surfaces comprise at least one sidewall surface and a bottom surface.
- 24.** The semiconductor device of claim **21**, where the at least two surfaces do not comprise a top surface of the metal gate core.
- 25.** The semiconductor device of claim **21**, further comprising: an interlevel dielectric that at least partially overlies the gate structure; and a borderless contact comprised of a metal.
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